

## **Multiple Postdoctoral Scholar Positions Open for Convection and Precipitation Studies**

**Responsibilities:** The Department of Civil and Environmental Engineering, Hong Kong University of Science and Technology invites applications for multiple postdoctoral positions in Prof. Hui Su's JC STEM Lab of Convection and Precipitation. The goal of the lab is to advance the understanding of convection and precipitation processes and improve prediction skills of precipitation, especially extreme precipitation. The research tasks include 1) create a comprehensive dataset of convection and precipitation structures and associated thermodynamic and dynamic environments using ground-based instruments on the campus of HKUST, which include cloud radar, rain radar, aerosol lidar, microwave radiometer of temperature and humidity sounding, 2D video disdrometer, wind lidar, etc; 2) analyze the observations to study the lifecycles of convection and precipitation; 3) perform high-resolution WRF model simulations of convection and precipitation events and improve model physics for better precipitation forecast; 4) examine the impacts of climate change on extreme precipitation. The appointees will carry out research in collaboration with the advisor and publish in peer-reviewed journals. They are expected to participate in scientific conferences and knowledge transfer activities sponsored by the Jockey Club Global STEM program.

**Qualifications:** Candidates must have a PhD in atmospheric science, climate science, or related scientific fields. Additional requirements include proficiency in scientific programming with Python and/or Fortran, experiences in statistical data analysis, data visualization, numerical modeling, and excellent oral and written communication skills. Familiarity with ground-based instrumentation is desired. The candidates shall demonstrate a record of relevant peer-reviewed publications and presentations at major international scientific meetings and conferences, and eagerness to work with scientists and supporting staff in a highly collaborative environment.

The postdoctoral scholar positions are awarded for a minimum of one-year period and may be renewed up to a maximum duration of three years. Candidates should submit the following documents to Prof. Hui Su at [cehsu@ust.hk](mailto:cehsu@ust.hk): CV, contact information for three references, and a cover letter stating their research accomplishments and interests. We especially encourage applicants of underrepresented groups in the relevant fields. The position is open immediately until filled.